Cross-Cultural Perspectives on the Classification of Children With Disabilities:

Part I. Issues in the Classification of Children With Disabilities

Lani Florian, University of Cambridge
Judith Hollenweger, Zurich University of Applied Sciences
Rune J. Simeonsson, University of North Carolina
Klaus Wedell, Institute of Education (Emeritus) University of London
Sheila Riddell, University of Edinburgh
Lorella Terzi, Roehampton University
Anthony Holland, University of Cambridge

This article is the first of a 2-part synthesis of an international seminar on the classification of children with disabilities. It synthesizes 6 papers that address broad questions relating to disability classification and categorization, cross-national comparisons on disability in education, the World Health Organization's *International Classification of Functioning, Disability and Health* (ICF), and Amartya Sen's capability approach. The focus of the article is the intentions, purposes, and future directions for disability classification in education. The authors argue that these advances offer researchers and policy-makers the opportunity to examine the relational nature of disability classification in any recalibration of statutory standards or educational policy reforms. Such developments are necessary to move beyond discrete categorical classification systems traditionally used in education that (a) do not recognize the complexity of human differences, (b) unnecessarily stigmatize children, and (c) do not always benefit the individuals who are classified.

Classifying, categorizing, and labeling children to provide education and other social services often are considered essential to ensuring equal opportunity in the allocation of these services. Systems of classification and their related forms of categorization are shaped by many factors—including their intended use—and by assumptions about human diversity. Educators generally use disability classification systems to identify and determine the eligibility of children for special education and other services. In many countries, however, the categories of disability and associated labels vary widely.

In 1972, Nicholas Hobbs of Vanderbilt University convened a task force to undertake a review of the disability classification of children and the negative consequences of labeling and categorization. That project resulted in two publications, *The Futures of Children* (1975a), presenting recommendations based on a synthesis of the reviews prepared in the other publication, the seminal two-volume sourcebook, *Issues in the Classification of Children* (1975b). This sourcebook, which is now out of print, remains one of the few comprehensive and scholarly discussions of the critical issues concerning disability classification systems in health, education, and mental health. Today, the issues that prompted Hobbs to undertake his

review are again of great importance nationally and internationally. In part this is due to increasing demands for (a) higher standards and accountability that include all children (Malmgrem, McLaughlin, & Nolet, 2005), (b) policies and practices to be evidence-based (Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005), and (c) resource allocation decisions to be fair and transparent (Audit Commission, 2002). These pressures have increased the need for meaningful data about which children are receiving additional services, as well as data for monitoring their learning and attainment (Department for Education and Skills, 2003; Office for Standards in Education, 2004; Organisation for Economic Cooperation and Development, 2005b). In addition, recent developments in the ways in which disability is being conceptualized have resulted in new international classification systems that challenge traditional ways of thinking about categories and labels.

This article, and the one that follows, synthesize the proceedings of a recent symposium on classification held in June 2004 at the University of Cambridge. Co-sponsored by the Faculty of Education at the University of Cambridge and the Department of Special Education at the University of Maryland–College Park, the symposium brought together colleagues from

special education, psychiatry, psychology, philosophy, law, and sociology to consider issues of classification in light of new knowledge and developments since Hobbs' seminal work on classification. The focus of this article is the intentions, purposes, and future directions for disability classification in education. It synthesizes six papers that addressed broad questions relating to disability classification and categorization, cross-national comparisons on disability in education, and proposals for new approaches to classify and conceptualize human difference. The accompanying article focuses on (a) how classification frameworks have been applied in education systems in the United States and the United Kingdom and (b) the challenges and controversies surrounding them.

Classification Systems

A system of classification can be thought of as a means of organizing information. The field of biology, for example, is based on the systematic arrangement of animals and plants into groups or categories (phylum, class, order, family, genus, and species) based on theoretical ideas about the relationships among them. Related systems of categorization are also ways of organizing information and are constructed to serve a particular purpose. The assignment of people into diagnostic categories of disability (e.g., mental retardation, learning disability, autism) has long been undertaken as part of the effort to understand human differences. For example, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994) provides a framework of multiaxial diagnoses that differentiate disorders of development (Axis II) from other mental disorders, such as mental illness (Axis I), and from general medical conditions (Axis III). These in turn may be associated with particular psychosocial and environmental problems (Axis IV).

Classification is also undertaken to rationalize the distribution of resources to particular groups. For instance, compensatory education programs, such as Head Start, bilingual education, and special education, are all intended to provide additional resources to ensure equal opportunities to education for different but overlapping classes or groups of students. All such programs require that certain criteria (e.g., those relating to socioeconomic status, English language proficiency, disability) be met to be eligible for the services provided. These criteria exist within some system of classification. For example, students must meet poverty criteria to be eligible to receive additional services under Title I of the U.S. Elementary and Secondary Education Act. The Individuals with Disabilities Education Act (IDEA) is based on a requirement that children be identified as having 1 of 13 disability categories that result in an adverse educational impact to receive special educational and related services. Although the IDEA does not require states to use these categories, it does require that students so identified not be denied an education. The classification process under both laws serves to determine which students receive something extra and aids systems of accountability to ensure that additional resources reach intended targets. Even when classification does not result in extra fiscal resources, classification can entitle certain students to additional supports, considerations, or accommodations, such as those provided under the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act.

Classification, categorization, and labeling in education are problematic, however, because the process of classification also reinforces the differences that specialized programs are intended to address (for an extended discussion of this phenomenon, see Minow, 1990). Classification can result in other unintended consequences, such as the overidentification of children from certain minority and socioeconomic groups (Donovan & Cross, 2002), lowering of expectations (Tomlinson, 1982), and the creation and maintenance of separate systems of provision (Ainscow, 1991). Keogh and MacMillan (1996) pointed to some of the problems associated with classification, categorization, and labeling of children, such as stigmatization, peer rejection, and lowered self-evaluation. They also raised the problems of reliability and validity with current categorization systems and concerns about the effectiveness of special education provision. Despite these concerns, systems of classification remain an important way of organizing information so that it can be passed to others, and they provide a framework to guide intervention. As Prewitt (2005) pointed out, there can be no public policy or research without classification. The key questions that result are as follows:

What kind of classification systems should be used? For what purposes should they be used? What norms should underpin them?

In the field of special education, the approach to classification is extremely important because it reveals a great deal about dominant discourses and the underlying relationships of knowledge and power. From a social policy perspective, Kirp (1982) and others have noted that the way in which a social problem is described says a great deal about how it will be resolved. For children who are the recipients of special education, classification can have material consequences in terms of where and how they are educated, which professionals they encounter, and what life courses are mapped out. Despite these overarching concerns, a universal system of classification or categorization in education does not exist. In practice, various approaches are used, and these may be based on different assumptions about human difference and disability. The medical, social, and ecological models of disability that have guided special education interventions are based on different assumptions about the relative importance of the role of individual characteristics and the influence of environmental conditions on human development. Furthermore, the purposes of classification may vary. The purpose may be predominantly about identification and eligibility, may be administrative, or may be to guide interventions. The particular purpose may also change

over time as conceptualizations and methods of classification change in response to concerns about stigma associated with certain labels and the inadequacy of particular classification schemes for meeting their intended purposes.

Intentions of Classification

Conceptualizing differences among children, and in particular, differences related to disability and special educational need, is a complex problem. What counts as a disability or a special educational need, how this relates to the difficulties that children experience in learning, and how to address these difficulties are much debated in education. The complexity of classification in education is further compounded by the numerous purposes that it serves and the intentions that underpin it.

Identification and Intervention

The first set of intentions reflects attempts to classify children diagnostically to provide appropriate interventions. In a historical context, disability categories were initially derived from a medical model of impairment (Abberley, 1987). This model conceptualizes human difference in terms of deficit or disease and involves attempts to seek and quantify impairments within the individual in ways that have direct implications for standard treatments or interventions. Indeed, in medicine, diagnoses of conditions are critical to effective treatment. In an effort to provide similar diagnostic precision, researchers developed psychological and educational assessments to identify the particular dysfunctional characteristics of a child so that treatment could be prescribed.

A classic example of borrowing from the medical model for the purpose of educational assessment can be seen in how the diagnosis of minimal cerebral dysfunction was used. In this case, a neurological impairment was postulated solely on the basis of cognitive and behavioral difficulties (McKeith & Bax, 1963). Over time, assessment focused on these cognitive and behavioral difficulties because they had more direct relevance to educational and other interventions. Such assessment approaches were associated with the growth of psychometrics and also an increase in screening and testing, with their underlying assumptions about "normal" and "abnormal" development and performance.

This focus on assessment as the basis for a diagnosticprescriptive approach has been a hallmarks of special education. It has also led to greater differentiation within the broader categories of disability and the creation of new subgroups with the aim of devising more focused educational provision. Despite its appeal, the diagnostic-prescriptive or aptitude-treatment-interaction approach has not produced much evidence that interventions were differentially effective with different categories of learners (Keogh & MacMillan, 1996). As a result, some disability advocates and profession-

als have contested the prevailing use of medical models for categorization in education (Abberley, 1987; Tomlinson, 1982). For example, some individuals contend that disability itself is a social construct and any attempts at classification are not helpful because they inevitably stigmatize the persons so labeled and do nothing to address the environmental factors and negative attitudes with which a particular label is associated (Oliver, 1990). In practice, there has been a gradual move away from "within-child" explanations of disability toward explanations that acknowledge an interaction with the environment.

The move to understand disabilities in the context in which they occur has been associated with an exploration of the ways in which schools and classrooms actually create difficulties in learning in the first place (Skrtic, 1991). Several researchers have attempted to develop whole-school approaches to preventing learning difficulties through examining and removing learning barriers so as to increase participation for all children (Booth & Ainscow, 2002). Because such approaches are intended to create conditions in schools that reduce difficulties in learning and behavior, they challenge the need for systems of classification and categorization, except for accountability purposes.

Parental Expectations

A second set of intentions relates to parents' concerns and interests. There are two issues here. One is the parents' desire to have an explanation for the problem their child is experiencing and to be reassured that they are not the cause of the disability. Understandably, there is a preference for labels that neither indicate that the source of the disability is genetic endowment nor imply parental negligence. Second is the parents' desire to secure appropriate services for their children. Parents are aware that labeling children with a specific disability is often an essential passport to additional provision of services (Wedell, 2003).

Legal Rights

A third set of intentions in classification derives from the linking of individuals to types of services and legislative protection. Historically, the purpose was to identify children who needed care and protection, usually in different and separate settings. The intent was not only the care of the individual but also the protection of the "normal" majority from someone who might have a negative impact on them (Lazerson, 1983). Often, children with more severe intellectual disabilities were (and in some countries still are) excluded from education entirely because they were considered "uneducable." Over time, laws guaranteeing all children's right to an education were passed, but these laws rely on a determination of eligibility that requires some form of classification, even when efforts are made to eliminate categorization. An example is the case in the United Kingdom as a result of the following recommendation in the Warnock Report:

Categorization perpetuates the sharp distinction between two groups of children, the handicapped and the non-handicapped. Furthermore, categorization focuses attention on only a small proportion of all those children We therefore recommend that statutory categorization of handicapped pupils should be abolished. (Department for Education and Science, 1978:43)

In the United Kingdom, children who need more services than are provided to other children of similar age are considered to have "special educational needs," although not all such children are formally identified. In contrast, in the United States, only children with identified disabilities are considered to have special educational needs. Children who are not identified as disabled but need additional supports may be eligible for additional services, but these would not be considered special education services. Despite these differences in practice, categorization by disability was not completely abolished in United Kingdom; instead, it was replaced by the "super category" of "special educational need." There are legal entitlements for identified children in both countries, guaranteed through the Individualized Education Program (IEP) in the United States or the Statement of Special Educational Needs in the United Kingdom. In addition, broader antidiscrimination legislation, such as the Americans with Disabilities Act (ADA) or the Disability Discrimination Act (DDA) in the United Kingdom, grants protection under the law to people with disabilities. In the case of legal rights, the classification of disability or special educational need assumes that there are differences between people that should be identified to provide whatever the individual needs to be able to access the same opportunities as others in the community and schools. Yet, as Minow (1990) reminded us:

Labeling and stereotyping others as different carries consequences in private and even intimate settings as well as public ones. You have the power to label others as "different" and to treat them differently on that basis. Even if you mean only to help others, not hurt them, you may realize the dilemma. By taking another person's difference into account in a world that has made difference matter-you may recreate and reestablish both the difference and its negative implications. (p. 374)

This dilemma highlights a limitation of laws that are intended to protect the rights of individuals.

Equity

A fourth set of intentions in classification for educational purposes centered on the quest for equity. Issues of equity are based on the concept of fairness and the allocation of finite resources to reflect the degree of need between one individual and another in ways that are consistent with society's values (Bowers & Parrish, 2000). As with the other intentions, dilemmas and paradoxical effects exist. Writing about vocationalism in the U.S. education system, Grubb and Lazerson (2004) noted,

While the expansion of schooling led to greater equity, as different students . . . gained greater access, the forms of schooling that students entered became more highly differentiated, to match varying occupations. Expansion in access and vocational differentiation went together, pushed along by choices that students (and their parents) made about further education. And so vocationalism fostered greater equity through enhanced access and led simultaneously to greater inequity through the endless differentiation of schooling. (p. 214)

A similar argument could be made about other areas of education, including special education. As more children have gained access to education, researchers and educators have developed more highly specialized programs to accommodate student diversity. Debates about equity include issues such as access to schooling, desegregation, affirmative action, school financing, curriculum tracking, and academic standards (Grubb & Lazerson, 2004).

Although classification systems are used to allocate available resources, develop and deploy professional expertise, assign pupils to groups, and determine school placement, they can also be used to (a) shift the responsibility from one group of professionals to a different group and (b) relocate certain children from one setting to another. The use of classification in the name of equity and fairness therefore requires careful consideration.

Accountability

Educational classification is also used to help develop accountability systems. For example, the internationally agreed upon goal of Education for All (United Nations Development Program, United Nations' Educational, Scientific and Cultural Organization [UNESCO], United Nations' Children's Fund, & World Bank, 1990), and the Millennium Development Goals (United Nations, 2000), which call for universal access to primary education for all children, require monitoring to ensure that vulnerable groups, such as children with disabilities, are not excluded from schooling. Such monitoring depends on the use of some form of classification framework as the basis for accountability systems to chart progress toward this goal.

Charting progress must somehow be measured as well as supported. This involves the production of data that can be used for monitoring standards across and within different groups of students. In recent years, there has been an increasing interest in the performance of all children at the national and international levels. If such comparisons are to be meaningful, they will depend on systems of classification that enable like to be compared with like.

International Comparisons

Current national and international approaches to classification are based on the premises that such distinct groups exist and that they can be described coherently. Assigning people into different categories on the basis of visual, auditory, motor, or mental capacities is a widely accepted practice, but as discussed previously, the various intentions that underpin the use of such categories put different demands on classification systems. There are presumptions that classification and categorization systems are necessary to improve provision of services, to ensure equitable criteria for eligibility and access to curriculum, and to establish meaningful statistics and indicators. If undertaken, classification should provide a basis for planning and providing interventions and should also allow for monitoring the effectiveness and equity of those interventions. Classification is a conceptual tool, however, and although more researchers, educators, and policymakers are recognizing the interaction of individual characteristics with environmental and social influences in the production of disability, categorizing individuals as disabled tends to locate the difference within the person (Tomlinson, 1982; Minow, 1990). The perception, responses, and consequences of such differences vary, making international comparisons difficult.

The Organisation for Economic Co-operation and Development (OECD) annually publishes data on international indicators on education, called Education at a Glance (OECD, 2005a). OECD conducts this data collection exercise in collaboration with EUROSTAT, a European Commission project that coordinates national statistical systems, and UNESCO. As a result of the revision of the International Standard Classification of Education (ISCED97; UNESCO 1997), a new definition for programs in special needs education was suggested. In consideration of these conceptual changes, in 1996 the OECD initiated a project to improve the collection of international data on disability in educational systems (OECD, 2004). OECD staff developed a resource-based definition to overcome the different national interpretations of concepts such as impairment or special needs, which covered very different populations. To accommodate all national conceptualizations of "special needs" and to monitor inclusive practices, the OECD applied a broad definition, to cover any students receiving extra resources independent of the school setting. OECD staff chose a tripartite classification system that assigned all students with different national labels and categories into three cross-national categories: A/disabilities, B/difficulties, or C/disadvantages, defined as follows:

Cross-national category "A/Disabilities": students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies (e.g., in relation to sensory, motor or neurological defects). The educational need is considered to arise primarily from problems attributable to these difficulties.

Cross-national category "B/Difficulties": students with behavioural or emotional disorders, or specific difficulties in learning. The educational need is considered to arise primarily from problems in the interaction between the student and the educational context.

Cross-national category "C/Disadvantage": students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors. The educational need is to compensate for the disadvantages attributable to these factors. (OECD, 2005b, p. 14)

These three cross-national categories are being used in an ongoing comparative study of different national labels in OECD member countries. The 2005 report is based on data provided by national authorities from 25 countries for which each country assigned its own national category into one of the three OECD cross-national categories, which were defined as one-dimensional and refer to categorically distinct groups. For example, it was assumed that a child who is blind would inevitably be classified as belonging in cross-national category A, even if she or he encounters learning difficulties or comes from a disadvantaged background.

Data clearly indicate that how the individual countries use this cross-national classification systems differ. The United States, for example, assigns children with the following identified disabilities to Category A: mental retardation, speech or language impairment, visual impairments, orthopedic impairments, other health impairments, deaf/blindness, multiple disabilities, hearing impairments, autism, traumatic brain injury, and developmental delay. Children identified as emotionally disturbed or with a specific learning disability are assigned to Category B, and children receiving services under Title 1-Disadvantaged students are assigned to Category C.

Although the OECD's approach to classification is onedimensional, it is an attempt to reflect data from 36 countries in a common format. As such, it represents a positive initial step toward documenting the variability across countries in how they target students for extra resources. However, the tripartite model does not capture the complexity of child characteristics, including information related to broader demographic characteristics or data at the country level (Sacker, Schoon, & Bartley, 2001), nor how these characteristics are variously interpreted in different countries. The policy frameworks operating within national special education contexts are underpinned by discourses that (a) describe and legitimize a particular view of the world and (b) serve as a basis for defining students in need of special education. Such frameworks promote the interests of particular professional or pressure groups and the classification systems with which they are associated.

World Health Organization Classifications of Disability

Conceptualizing differences among children, particularly those associated with disability and special needs, is a challenging educational problem that defies simple solutions. As noted earlier, researchers initially defined disability categories to suit a medical model of impairment, which continues to influence classification in education. In this section, we trace the evolution of international classifications of disability by the World Health Organization (WHO) to provide a perspective that may be of value in addressing the problems of classification in special education.

The International Classification of Diseases, now in a 10th revision (ICD-10; World Health Organization, 2005), is a classification of standard diagnoses used around the world to document the causes of death (mortality) and the distribution of disease and disorders (morbidity) in a given population. Because morbidity includes syndromes and diagnoses associated with disability, the ICD also constitutes a classification of disability. In fact, the ICD chapter on mental disorders contributed to the development of the DSM-IV, the official classification system of the American Psychiatric Association, with the most recent version being DSM-IV-TR (First & Pincus, 2002). Categorical approaches to disability, such as the IDEA eligibility categories of autism, learning disabilities, and mental retardation, are often based on the diagnosed conditions defined in the ICD and DSM-IV. Although categorical approaches can yield summary data on disability, categories are often inexact, may overlap, and do not provide information on the functional characteristics of identified children. Furthermore, assigning a child to a disability category does not lend itself to designing intervention or prevention initiatives. In short, the medical basis of a categorical approach is inadequate for documenting the complex and multidimensional nature of disability. The need to differentiate underlying health conditions and disorders from their consequences led to the development of the International Classification of Impairments, Disabilities and Handicaps (ICIDH; WHO, 1980). The ICIDH was not approved as an official classification but served as an experimental document that offered an alternate system of classification for conceptualizing disability at three levels: impairment, disability, and handicap. Using the qualifying phrase "in the context of health experience" (WHO, 1980, p. 47) the ICIDH defined the three levels as follows:

- impairment: " any loss or abnormality of psychological, physiological or anatomical structure or function" (p. 47);
- disability: "any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being" (p. 143);
- · handicap: "a disadvantage for a given individual, resulting from impairment or a disability, that limits or prevents the fulfillment of a role

that is normal (depending on age, sex and social or cultural factors) for that individual" (p. 185).

The separation of consequences from underlying health conditions and differentiating among impairment, disability, and handicap represented significant advances at that time in the conceptualization and documentation of disability. However, given its experimental status, the ICIDH was not widely disseminated or adopted. In addition, criticism was directed toward the underlying linear model, which posited a sequence from impairment to disability to handicap (Simeonsson et al., 2000), and its lack of consistency with the changing paradigm of disability. In that paradigm, disability was seen as a dynamic process in which the environment played a significant role (Verbrugge & Jette, 1994).

Concerns about the conceptual and taxonomic limitations of the ICIDH resulted in a decision by WHO to revise it in keeping with changing conceptions of the complex phenomenon of disability. That revision effort began in the early 1990s and culminated with the publication of the International Classification of Functioning, Disability and Health (ICF; WHO, 2001). The ICF is based on a" biopsychosocial" model encompassing the four domains of Body Structures, Body Function, Activities/ Participation and Environmental Factors. Disability is defined as the umbrella term for impairments of Body Structures and Functions, and for limitations or restrictions of Activities, and restrictions of Participation. The classification consists of chapters within each domain in which numeric codes and associated definitions are listed hierarchically. Definitions are stated in neutral terms and denote disability only when a severity qualifier is applied to indicate the extent of impairment, limitation, or restriction. For entries in the Environmental Factors domain, the qualifier can be used to denote factors that constitute both facilitators of and barriers to an individual's functioning. The ICF thus provides a taxonomy to document the nature and severity of an individual's functional limitations. For example, problems of learning and applying knowledge can be documented with codes in the first chapter of the Activity/Participation domain. In this chapter, specific aspects of learning and applying knowledge can be differentiated in terms of "Learning to Calculate" or "Solving Problems." Elements in the environment that contribute to problems in learning can be documented with appropriate codes from the Environmental Factors domain and can in turn provide implications for intervention.

Although the ICF was developed to provide universal coverage, it lacked content related to functional characteristics of the developing child, particularly for the first decade of life. WHO has been developing a version of the ICF for children and youth (ICF-CY), with an expected publication date of 2006 (Simeonsson et al., 2003). The ICF-CY extends the coverage of the main volume through the provision of additional content and greater detail to encompass the body functions and structures, activities, participation, and environments particular to infants, toddlers, young children, and adolescents. The ICF-CY thus provides for documentation of the changing nature of functioning as the child develops. For example, the limitations in communication in the 6-month-old, 3-year-old, and 5-year-old may reflect characteristics of preverbal, verbal, and conversational elements, respectively (Simeonsson, 2003). In that growth and functioning change rapidly with development, problems or impairments may be more difficult to document during childhood than in adulthood. Limitations of functioning or activity performance may in fact reflect delayed development rather than impairment. Therefore, the concept of impairment should be used with caution when applying it to children. The ICF-CY also recognizes that the nature of children's environments differs from that of adults, with significant implications for children's present and future functioning. The child's opportunities to participate are often controlled by parents, caregivers, or service providers and entail major life domains of play and school rather than work; therefore, we need to consider, for example, the caregiverchild relationship as a context of the child's functioning. The ICF-CY provides guidelines on the application of the model and classification and draws attention to these issues.

The ICF offers an opportunity to develop a more adequate representation of the complex issues arising in the education of children with disabilities. However, a multicategorical or multidimensional approach will need to be developed further to conceptualize "workable" disability descriptions in educational settings. These descriptions should be based on specific patterns of functioning and disabilities, rather than on single conditions or categories.

The ICF may be of value in addressing issues related to childhood disability in a variety of settings and services (Simeonsson et al., 2003). With particular reference to challenges in education, the ICF offers a holistic view of human functioning, differentiating problems of body function, performance of activities, and participation in major life roles. In current special education practice, these distinctions are masked when assigning children to diagnostic categories. Second, documentation of applicable codes can yield a profile of a child's functional limitations within domains of interest. Of particular relevance for classification in special education would be a focus on activity limitations rather than the physical and mental impairments that have been the primary focus of current categorical approaches. A third contribution of the ICF is the emphasis placed on documenting the role of the environment as a barrier to or facilitator of child functioning. This emphasis is consistent with the design of individualized interventions and education plans involving physical accommodations as well as instructional modifications. Fourth, the ICF framework may be of value as the basis for integrating a disability component into the discussions of quality indicators and systems of standards that are central to current educational policymaking. Finally, the fact that the ICF has a universal perspective and is not discipline-specific may facilitate interdisciplinary efforts that are central to interventions for many children with disabilities. Because the ICF is a new classification system, application to policy and practice is just

under way. Its potential to enhance practice in education and other services for children should be examined through clinical applications and research (Lollar & Simeonsson, 2005).

The European Union (EU) project, Measuring Health and Disability in Europe (MHADIE), launched in 2005, is based on the principles and procedures of the ICF. The purpose of the project is to examine the utility of the ICF for guiding policy development in Europe. One module seeks to review the nature of current classifications of disability in European education systems within the ICF framework. Project activities include the use of the ICF in the development of a methodology to link clinical (e.g., syndromes such as ADHD), administrative (e.g., provision of extra support for students with dyslexia), and educational (e.g., the use of an individual target setting) conceptualizations of disability to identify conceptual gaps and inconsistencies. One goal is to improve the mapping of links between childhood disability and the provision of educational services in European countries. A better understanding of the complex nature of disability in educational settings would be an important and promising development, given the limitations of current cross-national comparisons previously outlined.

The "Capability Approach"

The work we described in the previous section is important because the ICF is based on an interactive model, unlike other classification schemes currently applied in special education, which are unidimensional and locate the problem of difference within the individual. As Minow (1990) pointed out:

Shifting perspectives exposes how a "difference" depends on a relationship, a comparison drawn between people with reference to a norm. And making this reference point explicit opens up debate. Maybe the reference point itself should change. Employers do not need to treat pregnancy and parenthood as disabilities; instead they could treat them as part of the lives of valued workers. It is possible to replace a norm that excludes with a norm that includes. (p. 377)

In this context, the argument for a capability approach, as developed by the Nobel Prize-winning economist Amartya Sen (1987), provides an innovative and important perspective for developing practice in ways that may move beyond some of the problems described previously. The capability approach is a normative framework for the assessment of poverty, inequality, and the design of social institutions (Sen, 1987). It provides an answer to the "equality of what?" question, which is central to debates in political philosophy and social policy, by addressing which elements of inequality should social institutions and policies aim to equalize (for a detailed introduction to the capability approach, see Robeyns, 2003). The capability approach argues that equality and social arrangements should be evaluated in the space of capabilities, that is, in the space of the real freedoms people have to live the life they have reason to value. It maintains that what is fundamental in assessing equality is the extent to which people have such freedoms. Although Sen has not been concerned with questions of education directly, Saito (2003) and Unterhalter (2003) are among a growing number of educators who have begun to consider the implications of the capability approach for education.

The capability approach is used in economics as an alternative to fixed measures of commodities or purchasing power for the assessment of well-being or quality of life. Sen argues that it is the capability to function that is important to wellbeing rather than the things one has or can buy. In his view, a person may have his or her basic needs met but still be unable to achieve well-being if he or she is prevented from living the life he or she chooses or has reason to value. It is the focus on self-determination, freedom, and choice, rather than limitations of functioning, that offer the opportunity to go beyond the dilemmas of classification because the centrality of human diversity is fundamental to the capability metric. Sen claimed, "Human diversity is no secondary complication (to be ignored, or to be introduced 'later on'); it is a fundamental aspect of our interest in equality" (1992, p. xi). In this regard, the capability approach offers a framework for understanding disability that does not perceive it as a lack of normal powers of body and mind, nor does it ignore individual difference in the consideration of equal opportunity. Thus, the capability approach provides a theoretical framework with important implications for classification systems as well as for linking special and general education practice. More specifically, it can be argued that reconceptualizing disability and special needs through the capability approach allows the duality and dilemmas inherent in current understandings to be resolved (Terzi, 2005a).

Sen used the term functionings to describe the beings and doings that are valued by individuals and are considered constitutive of well-being. Walking, reading, being well nourished, being educated, having self-respect or acting in one's political capacity are all examples of functionings. Capabilities are the real opportunities and freedoms people have to achieve these valued functionings. Capabilities are therefore potential functionings or, as Sen (1992) stated, "They are various combinations of functionings (beings and doings) that the person can achieve. Thus, capability is a set of vectors of functionings, reflecting the person's freedom to lead one type of life or another ... to choose from possible livings" (p. 40).

As Florian (2005) noted, Sen argued that it is the capability to choose among various options, rather than the achievement of any particular standard of living, that gives meaning to well-being. His often quoted example is of the difference between two people who are starving, where one is poor and has no alternative while the other chooses to fast for religious reasons. In terms of functionings, the two may be equal in their state of nourishment, but in terms of capability they are quite different because one has chosen to starve while the other has no such choice. Likewise, the person who chooses to fast for religious reasons and the person who chooses a vegetarian diet may not be equal in terms of their state of nourishment although their capability to control their intake of food is the same. What Sen is postulating is that although individuals may differ in what well-being means to them, it is not how they differ (their functionings) that matters so much in explaining inequality as it is the difference between their capability to choose and achieve different functionings (outcomes). In other words, "The capability approach looks at a relationship between the resources people have and what they can do with them" (Unterhalter & Brighouse, 2003, p. 7).

Sen's capability approach provides two main insights. The first insight concerns how we can think of impairment and disability as important aspects of human diversity. Here, how people differ is not what is important; rather, it is the capability to choose and achieve that matters. The second insight highlights considerations of the relational aspect of disability with respect to both impairment and social institutions. Together, these insights constitute an important framework for reconceptualizing impairment and disability.

Terzi (2005a, 2005b) has suggested that it is possible to reconceptualize impairment and disability within the capability approach by reframing these concepts in terms of functionings and capabilities. For example, impairment is a personal feature that may affect certain functionings and therefore may become a disability under certain conditions or constraints. A person who cannot read is disabled in societies that place a premium on written language; a person who cannot walk is disabled in a physical environment that requires walking for mobility, and so on. As Terzi (2005a) noted:

Rethinking impairment and disability in terms of capabilities implies considering what are the full sets of capabilities one person can choose from and evaluating the impact of impairment on these sets of freedoms. It implies, moreover, considering the interaction between the individual and the environmental characteristics in assessing what circumstantial elements may lead impairment to become disability, and how this impacts on capabilities. (p. 453)

The capability approach permits an understanding of difference as a function of comparisons between people rather than distinctions on the basis of fixed categories (Minow, 1990). However promising, the capability approach is just beginning to be tested in educational settings (e.g., Unterhalter, 2003), and much theoretical work remains to be done if it is to be useful in informing classification frameworks for special education.

Discussion

In many countries, provision of special education services relies on a mix of classification schemes that are still predominately underpinned by a medical model of disability and the concept of discrete categories. These schemes may be classification systems oriented on

- clinical categories (such as different types of syndromes),
- educational categories (such as different types of special educational needs, which may or may not overlap with clinical categories), or
- administrative categories (such as different types of schools, interventions, or levels of funding).

Such classifications are of limited educational relevance because children assigned to similar categories may manifest very different difficulties in learning. Moreover, the nature of high-incidence disabilities requires professional judgment to be used in assigning children to categories such as learning disabilities. This contributes to variability in patterns of identification and raises questions about the validity of the categories and the reliability of the judgments. Discrete categories used in a given country are often idiosyncratic to the policies related to disability in that country; they therefore do not lend themselves to cross-national comparisons. In the translation of the primary data from individual countries to the tripartite categories in the OECD study, only some of the data could be utilized. The results thus represent only a limited comparison of the prevalence of children served across countries.

Often the rationale for assigning a child to a clinical category of disability is to document the need for special education. In this way, the categorization of *a difficulty in learning* as, for example, a *learning disability* locates the difficulty within the child. Thus the use of clinical categories for administrative purposes reinforces the idea that such clinical categories are educationally relevant. However, the use of clinical disability-specific categorical labels in educational settings has not helped us to understand the difficulties an individual child experiences in learning or the nature of the child's need for special education.

As reviewed earlier, what counts as disability or a special educational need, and how this relates to the difficulties that children experience in learning, have been subjects of contrasting and often opposing views. The debate is characterized, on one hand, by positions that see disability and special needs as caused by individual limitations and deficits, and on the other hand, by positions that see disability and special needs as caused by the limitations and deficits of the educational systems in accommodating the diversity of children they serve. Furthermore, the debate tends to be polarized between individuals who endorse the use of classification systems and categories as necessary for ensuring differential and appropriate provision of educational services and individuals who critically highlight the discriminatory and oppressive use of these systems. In the sourcebook on classification, Cromwell, Blashfield, and Strauss (1975) noted,

The labels applied to children are symbols constructed by senders to serve given purposes. From time to time, therefore, we should take stock of labels and classifications and their meanings in order to determine what purposes and injustices they are serving. (p. 5)

This article has advanced both taxonomic and conceptual approaches to address the challenges regarding classification in education. The ICF offers a universal model of functioning and disability and an associated taxonomy for documenting individual differences. As such, it can provide a common language for describing the individual in a holistic way. Implications of the ICF for educational purposes can be identified, but its utility awaits specific applications and research. Sen's capability approach may extend our understanding of human diversity because it recognizes disability as part of the human condition rather than as a deviation and contributes to ways of thinking about difference in relational, as opposed to fixed, categorical terms. Both conceptual advances offer researchers and policymakers the opportunity to examine their utility in any recalibration of statutory standards or educational policy reforms. To do otherwise runs the risk of recreating classification systems that unnecessarily stigmatize and fail to provide adequate services to children who need them. Although classification and categorization may be necessary for accountability in determining eligibility and the provision of services, history has shown that careful consideration needs to be given to unintended consequences. Both misuse and misunderstanding of the process of classification must be guarded against. Classification systems are at their best when used to order complex information and to bring benefit, but we should always ask, "What is the purpose of classification, and what conceptual model best fits to bring benefit to the individuals so classified?"

REFERENCES

Abberley, P. (1987). The concept of oppression and the development of a social theory of disability. *Disability, Handicap & Society*, 2(1), 5–19.

Ainscow, M. (Ed.). (1991). Effective schools for all. London: David Fulton. American Psychiatric Association. (1994) Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Audit Commission. (2002). Statutory assessment of SEN: In need of review? London: Author

Booth, T., & Ainscow, M. (2002). *The index for inclusion* (2nd ed.). Bristol, England: Centre for Studies in Inclusive Education.

Bowers, T., & Parrish, T. (2000). Funding of special education in the United States and England and Wales. In M. McLaughlin & M. Rouse (Eds.), Special education and school reform in the United States and Great Britain (pp. 167–193). London: Routledge.

Cromwell, R. L., Blashfield, R. K., & Strauss, J. S. (1975). Criteria for classification systems. In N. Hobbs (Ed.), Issues in the classification of children: A sourcebook on categories labels and their consequences (Vol. 1, pp. 4–25). San Francisco: Jossey-Bass.

Department for Education and Science. (1978). Report of the Commission of Inquiry into the education of handicapped children (Warnock Report). London: Her Majesty's Stationery Office.

- Department for Education and Skills. (2003). Data collection by type of special educational need. London: Author.
- Donovan, M. S., & Cross, C. T. (Eds.). (2002). Minority students in special education and gifted education. Washington, DC: National Academy of Sciences.
- Florian, L. (2005). 'Inclusion', 'special needs' and the search for new understandings. Support for Learning, 20(2), 96-98.
- First, M. B., & Pincus, H. A. (2002). The DSM-IV text revision: Rationale and potential impact on clinical practice. Psychiatric Services, 53(3), 288-292.
- Grubb, N., & Lazerson, M. (2004). The education gospel: The economic power of schooling. Cambridge MA: Harvard University Press.
- Hobbs, N. (Ed.). (1975a). The futures of children: Categories, labels and their consequences. San Francisco: Jossey-Bass.
- Hobbs, N. (Ed.). (1975b). Issues in the classification of children: Categories, labels and their consequence. San Francisco: Jossey-Bass.
- Keogh, B. K., & MacMillan, D. L. (1996). Exceptionality. In D. C. Berliner & R. C. Calfee (Eds.), Handbook of educational psychology (pp. 311-330). New York: Simon Shuster/Macmillan.
- Kirp, D. (1982). Professionalism as policy choice: British special education in comparative perspective. World Politics, 34, 137-174.
- Lazerson, M. (1983). The origins of special education. In J. G. Chambers & W. T. Hartman (Eds.), Special education policies: Their history, implementation and finance (pp. 3-47). Philadelphia: Temple University Press.
- Lollar, D. J., & Simeonsson, R. J. (2005). Diagnosis to function: Classification for children and youths. Journal of Developmental and Behavioral Pediatrics, 26, 3323-3330.
- Malmgren, K. W., McLaughlin, M. J., & Nolet, V. (2005). Accounting for the performance of students with disabilities on statewide assessments. The Journal of Special Education, 39, 86-96.
- McKeith, R., & Bax, M. (Eds.). (1963). Minimal cerebral dysfunction (Papers from the international study group held at Oxford, September 1962). London: Heinemann.
- Measuring Health and Disability in Europe. (2005). Measuring health and disability in Europe: Supporting policy development-a European coordination action for policy support. Retrieved October 15, 2005, from http://www.mhadie.it
- Minow, M. (1990). Making all the difference: Inclusion, exclusion and American law. Ithaca, NY: Cornell University Press.
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K. R. (2005). Research in special education: Scientific methods and evidence-based practices. Exceptional Children, 71, 137-148.
- Office for Standards in Education. (2004). Special educational needs and disability: Towards inclusive schools. London: Author.
- Oliver, M. (1990). The politics of disablement. Basingstoke, England: Mac-
- Organisation for Economic Co-operation and Development. (2004). Equity in education: Students with disabilities, learning difficulties and disadvantages. Paris: Author.
- Organisation for Economic Co-operation and Development. (2005a). Education at a glance. Paris: Author.
- Organisation for Economic Co-operation and Development. (2005b). Students with disabilities, learning difficulties and disadvantages-Statistics and indicators. Paris: Author.
- Prewitt, K. (2005, April). Demography and democracy. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Robeyns, I. (2003). The capability approach: An interdisciplinary introduction. Retrieved January 7, 2005, from http://www.ingridrobeyns.nl/ Downloads/CAtraining20031209.pdf
- Sacker, A., Schoon, L., & Bartley, M. (2001). Sources of bias in special needs

- provision in mainstream primary schools: Evidence from two British cohort studies. European Journal of Special Needs Education, 16, 259-
- Saito, M. (2003). Amartya Sen's capability approach to education: A critical examination. Journal of Philosophy of Education, 37(1), 17-32.
- Sen, A. (1987). The standard of living: Lecture I. Concepts and critiques. In G. Hawthorne (Ed.), The standard of living: The Tanner Lectures, Clare Hall, Cambridge, 1985 (pp. 1-20). Cambridge: Cambridge University
- Sen, A. (1992). Inequality reexamined. Oxford/New York: Clarendon Press & Russell Sage Foundation.
- Simeonsson, R. J. (2003). Classification of communication disabilities in children: Contribution of the International Classification of Functioning, Disability and Health. International Journal of Audiology, 42, S2-S8.
- Simeonsson, R. J., Leonardi, M., Lollar, D., Bjorck-Akesson, E., Hollenweger, J., & Martinuzzi, A. (2003). Applying the International Classification of Functioning, Disability and Health (ICF) to measure childhood disability. Disability and Rehabilitation, 25(11/12), 602-610.
- Simeonsson, R. J., Lollar, D., Hollowell, J., & Adams, M. (2000). Revision of the International Classification of Impairments, Disabilities and Handicaps: Developmental issues. Journal of Clinical Epidemiology, 53,
- Skrtic, T. M. (1991) Behind special education: A critical analysis of professional culture and school organization. Denver: Love.
- Terzi, L. (2005a). Beyond the dilemma of difference: The capability approach to disability and special educational needs. Journal of Philosophy of Education, 39, 443-459.
- Terzi, L. (2005b). A capability perspective on impairment, disability and special needs: Towards social justice in education. Theory and Research in Education, 3, 197-223.
- Tomlinson, S. (1982). A sociology of special education. London: Routledge & Kegan Paul.
- United Nations Educational, Scientific and Cultural Organization. (1997). International standard classification of education, ISCED 97. Paris: Author.
- United Nations. (2000). Millennium development goals. Retrieved August 11, 2005, from http://www.un.org/millenniumgoals
- United Nations Development Programme, United Nations Educational, Scientific and Cultural Organization, United Nations Children's Fund, & World Bank. (1990). Final report: World conference on education for all, Meeting Basic Learning Needs, 5–9 March 1990, Jomtien, Thailand. New York: United Nations Development Programme, UNESCO, UNICEF, & World Bank Inter-Agency Commission, World Conference on Education For All.
- Unterhalter, E. (2003). The capabilities approach and gendered education: an examination of South African complexities. Theory and Research in Education, 1(1), 7-22,
- Unterhalter, E., & Brighouse, H. (2003 September). Distribution of what? How will we know if we have achieved education for all by 2015? Paper presented at the third conference on the capability approach, From Sustainable Development to Sustainable Freedom, Pavia, Italy.
- Verbrugge, L. M., & Jette, A. M. (1994). The disablement process. Social Science & Medicine (1967), 38, 1-14.
- Wedell, K. (2003). What's in a label? British Journal of Special Education, 30(2), 107.
- World Health Organization. (1980). International classification of impairments, disabilities, and handicaps. Geneva: Author.
- World Health Organization. (2001). International classification of functioning, disability and health (ICF). Geneva: Author.
- World Health Organization. (2005). International classification of diseases and health related problems: ICD-10 (2nd ed.). Geneva: Author.